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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,605	07/17/2003	Qi Xiang	64965-168	9283
. 75	. 7590 11/16/2005		EXAMINER	
McDermott, Will & Emery			CRANE, SARA W	
600 13th Street, N.W. Washington, DC 20005-3096			ART UNIT	PAPER NUMBER
··· usg.c, 2			2811	
			DATE MAILED: 11/16/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/620,605	XIANG, QI			
Office Action Summary	Examiner	Art Unit			
	Sara W. Crane	2811			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>02 Se</u>	eptember 2005.				
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>10-27</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) 10-27 is/are rejected.					
7) Claim(s) is/are objected to.	r election requirement				
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Examine	r.	·			
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Patent Application (PTO-152)				

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## **DETAILED ACTION**

Claims 10-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As noted in the previous Office action, It is not clear whether the claim language of "interposed isolation region" means an isolation region that contacts the first and second regions, or an isolation region that merely lies somewhere between the two regions. For example, in claim 10, the phrase "spaced apart from each other by interposed isolation regions" is not clear. It seems to the examiner that there are two ways to interpret the word "interposed." The dictionary interpretation would be that "interposed" derives from the verb "interpose," which describes a physical act or action of insertion or of placing one part between two other parts. So that, grammatically, "interposed" would refer to the structural arrangement resulting from the action. With respect to claim 10, reference to the dictionary definition would therefore lead one to conclude that the "one or more first regions" and the "one or more second regions" were formed first, and then the "isolation regions" were inserted or introduced between them. So the "isolation regions" are located somewhere between the regions that are "spaced apart from each other by interposed isolation regions." This analysis does not really specify whether or not the isolation region contacts the first and second regions.

But Applicant's specification seems to use the word "interposed" in a sense not entirely consistent with the dictionary definition. Under "Summary of the Invention," second paragraph, a sentence reads, "The first FET comprises a gate electrode formed

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over the SiGe layer, and a gate oxide layer interposed between the gate electrode and the SiGe layer, . . . . " Here the word "interposed" refers merely to a location, and not at all to the result of any action. (One would not form the gate electrode and the SiGe layer first, and then interpose, or insert, a gate electrode between them.) So, under this "looser" interpretation of the word "interposed," no specific actions or process steps would be implied. This type of analysis is proper to aid in claim interpretation, because Applicant can be his or her own lexicographer. But the sentence quoted above reads, in its entirety, "The first FET comprises a gate electrode formed over the SiGe layer, and a gate oxide layer interposed between the gate electrode and the SiGe layer, wherein the gate oxide layer is formed immediately adjacent to and in contact with the SiGe layer." So the term "interposed," according to the usage in Applicant's specification, means not only "located between," but "formed immediately adjacent to and in contact with."

So would one interpret the word "interposed" as meaning "formed immediately adjacent to and in contact with," as in the specification? Or would one interpret the word "interposed" as meaning "the result of an insertion step," as in the literal or dictionary usage? Applicant suggests in the Remarks of 2 September 2005 that one should adopt the broadest reasonable interpretation consistent with the specification. Well, of course. But what interpretation would that be? As noted above, the problem seems to arise because Applicant's specification uses the term "interposed" in a situation where an action of "interposing" has never taken place, and the term refers only to a location, rather than referring to the literal meaning. So it would seem that the

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broadest reasonable interpretation that is also consistent with the specification would be "formed immediately adjacent to and in contact with," as quoted from the specification above. Such an interpretation could, of course, be adopted in an examiner's statement of reasons for allowance, but a clear statement by Applicant of the scope of claim coverage sought really should be provided in the record.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Crane, whose telephone number is (571) 272-1652.

The supervisor for Art Unit 2811, Eddie Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sara W. Crane
Primary Examiner
Art Unit 2811

Second College Edition

## American Heritage Dictionary

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is or surface of something; inner. 2. Residing in or in on the essential nature of something; intrinsic. and on the essential nature within the body. 4. Of or took esting or effective within the body. 4. Of or took esting. I on the one-side and the original of the original original

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stite internal. 2. 10 table of one's attitudes or beliefs. —International make an integral part of one's attitudes or beliefs. —International medicine n. The medical study and treatment of formal medicine n. The medical study and treatment of simple medicine n. The medical study and treatment of the medicine medicine

among nations, esp. in politics and economy. —in'ternational plate (In'tar-nāsh'a-na-līz') Ir.v. -ized, -iz-ing, irrar-nā-lūn-al-ize (In'tar-nāsh'a-na-līz') Ir.v. -ized, -iz-ing, irrar-nā-lūn-al-ize (In'tar-nāsh'a-na-līz') Ir.v. -ized, -iz-ing, irrar-nā-lūn-al-iza'iton n.
Indenational law n. A set of rules generally regarded and secepted as binding in relations between states and nations. International Morse code n. The continental code. International Phonetic Alphabet n. A phonetic alphabet sponsored by the International Phonetic Association to prosponsored by the International Phonetic Association to prosponsored by the International Phonetic Association to prosponsored sunity symbol for each speech sound.

International System n. A complete, coherent system of international System n. A complete, coherent system of units used for scientific work, based on the metric system givin the addition of units of time, electric current, temperatur, and luminous intensity.

International unit n. An internationally accepted quantity of a biological, as a vitamin or antibiotic, that produces a specific biological effect.

Interne (in'tūrn', in-tūrn') n., v., & adj. Variant of Internatione (in'tūrn-ne') or fatal to both sides. 2. Characterized by bloodshed or carnage. 3. Of or relating to struggle within a group. [Lat. internecinns < internecion, massacre < internecae, to slaughter: inter- (intensive) + necae, to kill.] Internec (in'tūrne') n. One who is interned.

Interneuron (in'tar-ne') n. One who is interned.

neuton. —In terrol to his most of his most

state of being interned.

Internode (in'tor-nôd') n. A section or part between two internode (in'tor-nôd') n. A section or part between two index, so of a nerve or stem.—In'ternod'al (-nôd'l) adj. located or internocear (in'tor-nôo'klê-ər, -nyôò'-) adj. Located or

occurring between nuclei. Internun-cial (In'tor-nun'shol, -se-ol) adj. Linking two neu-tons in a neuronal pathway. [INTERNUNCI(0) + -AL.] —in'-

n'clai-ly adv. brun/clal·ly adv.

Internun-clal·ly adv.

Internun-clal·ly (n'iar-nūn'sè-ô', -nōōn'-) n., pl. -os. 1. A Vatican diplomatic envoy or representative ranking just behath a nuncio. 2. A messenger or agent; go-between. [Ital. internunitis, mediator: inter., between + internunitis (Lat. internunitis.)

internuntio S. Lat. internuntius, mediator: inter, between intenuntius, messenger.]
Intero-ceptor (In'tor-ō-sēp'tər) n. A specialized sensory intero-ceptor (In'tor-ō-sēp'tər) n. A specialized sensory intero-ceptor responding to stimuli originating in internal organs. [In'tero-tep'tive adj. Intero-tep'tive adj. Intero-tel'(In'tor-ō-fis, -of'is) adj. Taking place between offices, esp. of an organization.

Interperlate (in'tor-p'd'at', in'tor-p-alat') n.v. -lated, -lated, late. To question (a government official) formally about government policy or action or about personal behavior. [Lat. interpellare, interpellar, to interrupt, disturb.]

—in'tar-pel-ta'tion n.—In'tar-pel'(at') v. trated, -trating. Interpen-trate (in'tor-pèn'(at') v. trated, -trating. -in't. To penetrate mutually. —in'terpen'e-tra'tion n. —in'terpen'e-ta'tion n. —in'terpen'e-ta'tive adj.

Interperson al (in'tar-pûr'sa-nal) adj. Of, relating to, involving, or being relations between persons. —in'terperon-al-ty adv.

internal-combustion engine interphase (in'tor-faz') n. A period or stage between two successive mitotic divisions of a cell nucleus. —In'terphase' v. (phased, -phasing, -phasea). Interplane-tary (in tor-planfi-te's) adj. Between planets interplay (in'tor-pla') n. Reciprocal action and reaction; interplay (in'tor-pla') n. Reciprocal action and reaction; interplad (in'tor-pla') intr.v. —pead-ed, —plead-ing, -pleads. Low. To go to court together to establish a dispute involving a third party. [ME enterpleder < AN enterpleder: enter, between (< Lat. inter-) + pleder, to plead < OFr. platider. —see PLEAD.]

Interplead-er (in'tor-ple'dor) n. Low. A legal procedure to determine which of two persons bringing the same suit against a third person is the rightful claimant. Interpolate (in-tur'po-lat') v. -lated, lating, -lates. —tr.

1. To insert or introduce between other elements or parts.

2. a. To insert (material) into a text. b. To insert into a conversation. 3. To change or falsify (a text) by introducing new or false material. 4. Math. To determine a value of (a function) between known values by a procedure or algorithm different from that specified by the function itself. —intr. To make insertions or additions. [Lat. interpolare, interpolare interpolare, between + policy a embellish.] —Interpolare (in'tor-pob') v. posed, pos-ing, pos-85 —ir.

1. a. To insert or introduce between parts. b. To place (One self) between. 2. To introduce or interfere or intervence. —intr. 1. To come between. 2. To come between the parties —interpose (in'tor-pob') v. posed, pos-ing, pos-85 —ir. —

(pa\_zish'ən) n.

In-ter-pret (In-tar-prit) ... pratied, pretting prets. — Ir.

In-ter-pret (In-tar-prit) ... pratied, pretting prets. — Ir.

I. To explain to oneself the meaning of; elucidate. 2. To expound the significance of. 3. To represent or render the meaning of, esp. through artistic performance. — intr. 1. To offer an explanation. 2. To serve as an interprete for speakers of different languages. [ME interpreten < OFr. interpreter Lat. interpretari < interprets, negotiator, explainer.] — inter-preta-ble/left, inter-preta-ble-ness n. — in-ter-preta-ble-ness n. — in-ter-preta-ble-ness n. (-po-zish'ən) n. in-ter-pret (m-

-interpreta-birity, interpreta-bieness n.—interpreta-birity, interpreta-birity n. 1. The act, process, interpreta-tion (in-tûr pri-tâ'shan) n. 1. The act, process, or result of interpreting; explanation. 2. A representation of the meaning of a work of art as expressed esp. in representation or performance.—interpreta-tion-al adj. Interpreta-tive (in-tûr pri-tâ'w) adj. Expository; explanatory.—interpreta-tiverly adv. interpreter (in-tûr pri-tar) n. 1. One who translates orally from one language into another. 2. One who gives or expounds an interpretation. 3. Computer Sci. A program that translates an instruction into a machine language and executes it before proceeding to the next one. Interpretive (in-tûr pri-tiv) adj. Interpretative.—in-terpretively adv.

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PPop/r roar/s sauce/sh ship, dish/t tight/th thin, path/th this, bathe/ū cut/ūr urge/v valve/w with/y yes/z zebra, size/ th vision / a about, item, edible, gallop, circus / ce Fr. feu, Ger. schön / ti Fr. tu, Ger. tiber / kH Ger. ich, Scot. loch/ N Fr. bon.